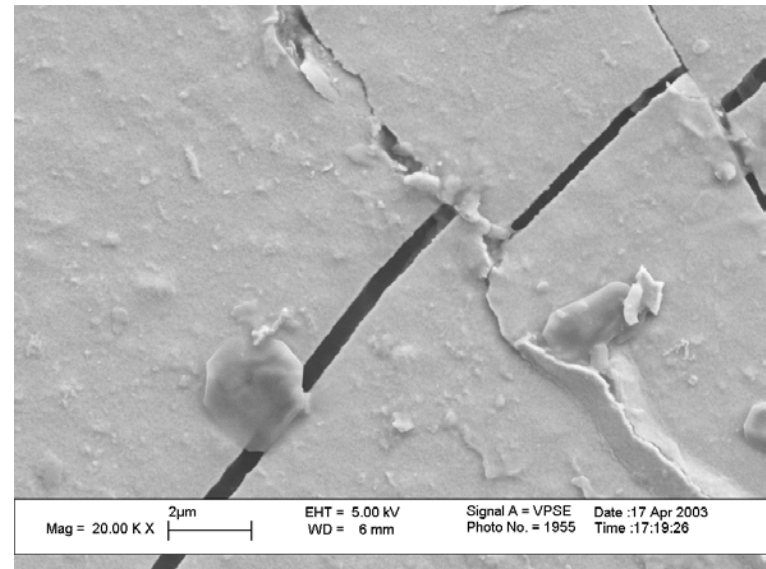


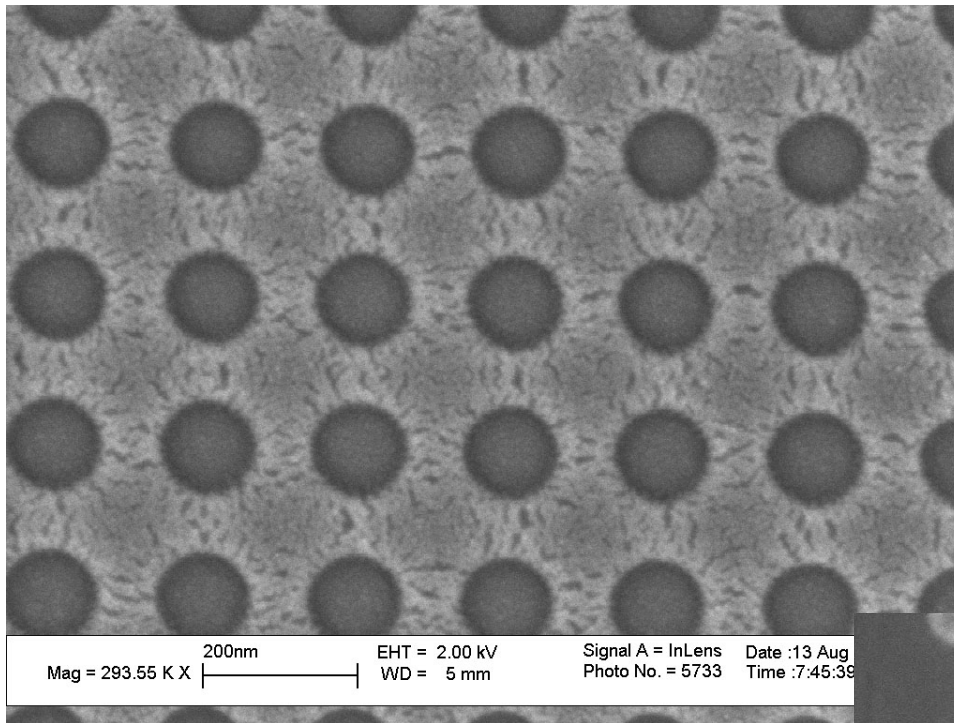
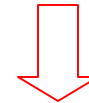
Purchase of a LEO 1530 - VP Scanning Electron Microscope at Brown University



Brown University has purchased and installed a LEO-VP scanning electron microscope through funds provided by a major equipment grant from NSF. This new microscope has provided a vital upgrade to our shared microscopy facility. The instrument is being used by a large number of research groups at Brown including engineering, physics, and geology. The picture on the left above shows the microscope and the micrograph on the right shows a picture of indium tin oxide on a PET substrate as an example of work done with this scope. One of the important advances for Brown is that this scope allows us to examine polymer and biological systems. We expect to work with Hampton University during the coming year to establish distant learning capabilities for use of this scope.

E-beam Lithography Test Results on LEO SEM

After Evaporation
and Lift-off



Single layer 950K
PMMA on Si

Because of the great improvement of this microscope over the previous ones in our lab, other faculty have already invested in upgrades. Prof. Arto Nurmikko, through other research funds, has adapted the scope for e-beam lithography. These two micrographs show two examples of the patterns he has made.

